

IN THE CLAIMS:

What is claimed is:

1. (Currently amended) An injection molding apparatus for molding products comprising:
 - a first cavity chamber for forming a seal liner, the first cavity chamber having an outer edge;
 - a second cavity chamber for forming a shell, the second cavity chamber being positioned adjacent to the first cavity chamber, the second cavity chamber having a center;
 - a first nozzle for a seal liner material positioned near the outer edge of the first cavity chamber, the first nozzle being in direct communication with the first cavity chamber;
 - a second nozzle for a shell material positioned near the center of the second cavity chamber, the second nozzle being in direct communication with the second cavity chamber; and
 - a mold core positioned in and moved between the first and second cavity chambers.
2. (Original) The injection molding apparatus of claim 1 wherein the mold core is rotationally moved between the first and second cavity chambers.
3. (Original) The injection molding apparatus of claim 1 further comprising a stripper plate positioned around the mold core for removing shells from the mold core.

4. (Original) The injection molding apparatus of claim 1 wherein the mold core has an end opposite a base, the end having a seal liner portion for forming a seal liner cavity opening with the first cavity chamber, and a shell portion for forming a shell cavity opening with the second cavity chamber.

5. (Original) The injection molding apparatus of claim 1 wherein the first nozzle is connected to and in communication with a first melt distribution manifold, and the second nozzle is connected to and in communication with a second melt distribution manifold.

6. (Currently amended) The injection molding apparatus of claim 1 wherein the seal liner material and the shell material comprises two different materials.

7. (Currently amended) The injection molding apparatus of claim 1 wherein the seal liner material comprises santoprene, and the shell material comprises polypropylene.

8. (Currently amended) The injection molding apparatus of claim 1 wherein the first nozzle has a body and a an-angled tip, the tip being angled relative to the body of the nozzle.

9. (Currently amended) The injection molding apparatus of claim 1 wherein the first nozzle is thermal-gated at the first cavity and the second nozzle is valve-gated at the second cavity.

10. (Original) An injection molding apparatus for molding products comprising:

- a first and a second seal liner cavity chamber for forming a seal liner, the first and second seal liner cavity chambers each having an outer edge;
- a first and a second shell cavity chamber for forming a shell over the seal liner, the first shell cavity chamber being adjacent to the first seal liner cavity chamber, the second shell cavity chamber being adjacent to the second seal liner cavity chamber, the first and second shell cavity chambers each having a center;
- a first and a second offset nozzle for a seal liner material, the first offset nozzle being positioned near the outer edge of the first seal liner cavity chamber, the first offset nozzle also being in communication with the first seal liner cavity chamber, the second offset nozzle positioned near the outer edge of the second seal liner cavity chamber, the second offset nozzle also being in communication with the second seal liner cavity chamber;
- a first and a second center nozzle for a shell material, the first center nozzle being positioned near the center of the first shell cavity chamber, the first center nozzle also being in communication with the first shell cavity chamber, the second center nozzle positioned near the center of the second shell cavity chamber, the second center nozzle also being in communication with the second shell cavity chamber; and
- a first, a second, a third, and a fourth mold core, the first mold core capable of being positioned in and moved between the first seal liner cavity chamber and the second shell cavity chamber, the second mold core capable of being positioned in and moved between the first shell cavity chamber and the first seal liner cavity chamber, the third mold core capable of being positioned in and moved between the second seal liner cavity chamber and the first shell

cavity chamber, and the fourth mold core capable of being positioned in and moved between the second shell cavity chamber and the second seal liner cavity chamber.

11. (Original) The injection molding apparatus of claim 10 wherein each mold core is rotationally moved between the cavity chambers.

12. (Original) The injection molding apparatus of claim 10 further comprising a stripper plate positioned around the mold core for removing shells from the mold core.

13. (Original) The injection molding apparatus of claim 10 wherein each mold core has an end opposite a base, the end having a seal liner portion for forming a seal liner cavity opening with the first cavity chamber, and a shell portion for forming a shell cavity opening with the second cavity chamber.

14. (Original) The injection molding apparatus of claim 10 wherein the first and second offset nozzles are connected to and in communication with a first melt distribution manifold, and the first and second center nozzles are connected to and in communication with a second melt distribution manifold.

15. (Currently amended) The injection molding apparatus of claim 10 wherein the seal liner material and the shell material comprises two different materials.

16. (Currently amended) The injection molding apparatus of claim ~~10~~ 15 wherein the seal liner material comprises santoprene, and the shell material comprises polypropylene.

17. (Currently amended) The injection molding apparatus of claim 10 wherein the first and second offset nozzles each have a body and a an angled tip, the tip being angled relative to the body of the nozzle.

18. (Currently amended) The injection molding apparatus of claim 10 wherein the first and second offset nozzles are thermal-gated at the first cavity, and the first and second center nozzles are valve-gated at the second cavity.

19. (Original) The injection molding apparatus of claim 10 wherein seal liners are formed on the first and third mold cores at about the same time as shells are formed on the second and fourth mold cores, and seal liners are formed on the second and fourth mold cores at about the same time as shells are formed on the first and third mold cores.

20. (Currently amended) In combination with an injection molding machine having at least a first material and a second material, an injection molding apparatus comprising:

a first cavity chamber for forming a seal liner, the first cavity chamber having an outer edge and a center;

a second cavity chamber for forming a shell, the second cavity chamber being adjacent to the first cavity chamber, the second cavity chamber having a center;

a first melt distribution manifold having a first material melt passage connected to and in communication with a first material injection entry, the first material injection entry being connected to and in communication with the first material of the injection molding machine;

a second melt distribution manifold having a second material melt passage connected to and in communication with a second material injection entry, the second material injection entry being connected to and in communication with the second material of the injection molding machine;

a first nozzle positioned near the outer edge of the first cavity chamber and offset from the center of the first cavity chamber, the first nozzle being in direct communication with the first cavity chamber and the first material melt passage;

a second nozzle positioned near the center of the second cavity chamber, the second nozzle being in direct communication with the second cavity chamber and the second material melt passage; and

a mold core positioned in and moved rotationally between the first and second cavity chambers.